

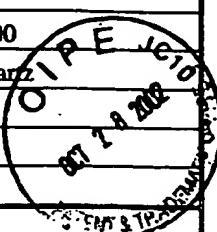
Substitute for Form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/704,991
Filing Date	November 2, 2000
First Named Inventor:	Edward L. Schwarz
Group Art Unit	2621
Examiner Name	Unknown



Sheet 1 of 5

Attorney Docket Number

74451.P042X2

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
JW	A	4985927		Norwood et al.	01/15/1991	
JW	B	4987480		Lipmann et al.	01/22/1991	
JW	C	5000183		Bonnefous	03/19/1991	
JW	D	5001764		Wood et al.	03/19/1991	
JW	E	5014134		Lawton et al.	05/07/1991	
JW	F	5018210		Merryman et al.	05/21/1991	
JW	G	5068911		Resnikoff et al.	11/26/1991	
JW	H	5073964		Resnikoff	12/17/1991	
JW	I	5095447		Manns et al.	03/10/1992	OCT 31 2002
JW	J	5101446		Resnikoff et al.	03/31/1992	Technology Center 2600
JW	K	5103306		Weiman et al.	04/07/1992	
JW	L	5121191		Cassereau et al.	06/09/1992	
JW	M	5124930		Nicolas et al.	06/23/1992	
JW	N	5128757		Citta et al.	07/07/1992	
JW	O	5148498		Resnikoff et al.	09/15/1992	
JW	P	5152953		Ackerman	10/06/1992	
JW	Q	5156943		Whitney	10/20/1992	
JW	R	5173880		Duren et al.	12/22/1992	
JW	S	5420891		Akansu	05/30/1995	
JW	T	3580655		Leith et al.	05/25/1971	

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Technology Center 2600**FOREIGN PATENT DOCUMENTS**

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
JW	U	WO	9423385			10/13/1994		
JW	V	EP	0622741			03/30/1994		
JW	W	UK	2284121			05/24/1995		
JW	X	WO	9609718			03/28/1996		
JW	Y	WO	9519683			07/20/1995		
JW	Z	EP	0701375			03/13/1996		
JW	AA	UK	2211691			07/05/1989		

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4/12/05

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Sheet 2 of 5 Attorney Docket Number 74451.P042X2

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		Number Code ²	Kind (If known)			
JW	BB	3950103		Schmidt-Weinmar	04/13/1976	
JW	CC	4136954		Jamieson	01/30/1979	
JW	DD	4223354		Noble et al.	09/16/1980	
JW	EE	4599567		Goupillaud et al.	07/08/1986	
JW	FF	4663660		Fedele et al.	05/05/1987	
JW	GG	4701006		Perlmutter	10/20/1987	
JW	HH	4760563		Beykin	07/26/1988	
JW	II	4785349		Keith et al.	11/15/1988	
JW	JJ	4805129		David	02/14/1989	OCT 31 2002
JW	KK	4817182		Adelson et al.	03/28/1989	
JW	LL	4821223		David	04/11/1989	Technology Center 2600
JW	MM	4827336		Acampora et al.	05/02/1989	
JW	NN	4829378		LeGall	05/09/1989	
JW	OO	4837517		Barber	06/06/1989	
JW	PP	4864398		Avis et al.	09/05/1989	
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JW	RR	4904073		Lawton et al.	02/27/1990	
JW	SS	4929223		Walsh	05/29/1990	
JW	TT	4936665		Whitney	06/26/1990	
JW	UU	4974187		Lawton	11/27/1990	
JW	VV	4982283		Acampora	1/1/1991	

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
JW	WW	EP	0593013			04/20/1994		
JW	XX	EP	0510933			10/28/1992		
JW	YY	WO	8810049			12/15/1988		

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09/04.991

November 2, 2008

Edward J. Schwartz

2621

Unknown

Sheet 1

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Attorney Docket Number

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		Number Code ²	Kind (If known)			
JW	ZZ	4393456		Marshall, Jr.	07/12/1983	
JW	AAA	4569075		Nussbaumer	02/14/1986	
JW	BBB	4652881		Lewis	03/24/1987	
JW	CCC	4674125		Carlson et al.	06/16/1987	
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JW	HHH	4868868		Yazu et al.	09/19/1989	
JW	III	4918524		Ansari et al.	04/17/1990	
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JW	MMM	5101280		Moronaga et al.	03/31/1992	
JW	NNN	5128791		LeGall et al.	07/07/1992	
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JW	QQQ	5321776		Shapiro	06/14/1994	
JW	RRR	5412741		Shapiro	05/02/1995	
JW	SSS	4155097		Lux	05/15/1979	

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Application Number

09/04.991

Filing Date

November 2, 2000

First Named Inventor:

Edward L. Schwartz

Group Art Unit

2621

Examiner Name

Unknown

Attorney Docket Number 74451.P042X

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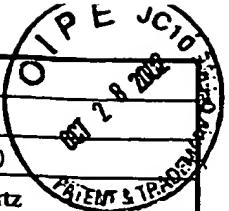
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Sheet

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First Named Inventor:	Edward L. Schwartz
Group Art Unit	2621
Examiner Name	Unknown

Attorney Docket Number

74451.P042X2

OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
JL	WWW	1977 IEEE International Conference on Acoustics Speech & Signal Processing, "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", D. Esteban and C. Galand, pp. 191-195.	
JL	XXX	Martin Vetterli, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing 10</u> , (1986), pp. 219-244.	
JL	YYY	R.E. Crochiere, S.A. Webber, J.L. Flanagan, "Digital Coding of Speech in Sub-bands", 1976, American Telephone and Telegraph Company, The Bell System Technical Journal, Vol. 55, No. 8, October 1976, pp. 1069-1085.	
JL	ZZZ	John W. Woods and Sean D. O'Neil, "Sub-band Coding of Images", <u>Proceedings ICASSP 86</u> , Tokyo, Japan, April 1986, pp. 1005-1008.	
JL	AAAA	"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", P.H. Westernick, J. Biemond and D.E. Boekee, pp. 1378 - 1381.	
JL	BBBB	Mark J.T. Smith and Thomas P. Barnwell, III, "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. ASSP-34, No. 3, June 1986, p. 434-441.	
JL	CCCC	Marvin Vetterli, "Multi-Dimensional Sub-band coding: Some Theory and Algorithms", <u>Signal Processing 6</u> (1984), pp. 97-112.	
JL	DDDD	H. Gharavi and Ali Tabatabai, "Sub-band coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing, pp. 51-61.	
JL	EEEE	"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", H. Gharavi and A. Tabatabai, pp. 2384-2387.	
JL	FFFF	International Search report for Application No. GB 9518298.6, dated November 10, 1995.	RECEIVED OCT 31 2002 Technology Center 2600

Examiner Signature		Date Considered	4/12/05
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PATE Sheet 1 of 6

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Application Number	09/704,991
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First Named Inventor:	Edward L. Schwartz
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Examiner Name	Unknown

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		Number Code ²	Kind (if known)			
JW	A	6118902		Knowles	09/12/2000	
JW	B	5867602		Zandi et al.	02/02/1999	
JW	C	5638498		Tyler et al.	06/10/1997	
JW	D	5602589		Vishwanath et al.	02/11/1997	
JW	E	5563960		Shapiro	10/08/1996	
JW	F	5546477		Knowles et al.	08/13/1996	
JW	G	5537493		Wilkinson	07/16/1996	
JW	H	5534925		Zhong	07/09/1996	
JW	I	5497435		Berger	03/05/1996	
JW	J	5453945		Tucker et al.	09/26/1995	RECEIVED
JW	K	5412741		Shapiro	05/02/1995	NOV 01 2002
JW	L	5381145		Allen et al.	01/10/1995	
JW	M	5379355		Allen	01/03/1995	Technology Center 2600
JW	N1	5347479		Miyazaki	09/13/1994	
JW	N2	5335016		Nakagawa	08/02/1994	
JW	O	5241395		Chen	08/31/1993	
JW	P	5235434		Wober	05/10/1993	
JW	Q	5148498		Resnikoff et al.	09/1992	
JW	R	5109451		Aono et al.	04/28/1992	
JW	S	4999705		Puri	03/12/1991	
JW	T	4922544		Stansfield et al.	05/01/1990	

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		Office ³	Number ⁴	Kind Code ⁵ (if known)			
JW	U	GB	2303031			06/25/1996	
JW	V	GB	2303030			06/25/1996	
JW	W	GB	2293734			07/09/1995	
JW	X	GB	2293733			07/09/1995	
JW	Y	UK	2285374	A		05/07/1995	
JW	Z	EP	0662741	A2		11/02/1994	
JW	AA	EP	0611051	A1		08/17/1994	

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JW	DD	WO	9417492			08/04/1994		
JW	EE	EP	0593013	A2		04/20/1994		
JW	FF	WO	9310634			05/27/1993		
JW	GG	EP	0510933	A1		10/28/1992		
JW	HH	WO	9118361			11/28/1991		
JW	II	WO	9103902			03/21/1991		
JW	JJ	UK	2211691	A		05/07/1989		

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Sheet 4

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Attorney Docket Number 074451.P042X2

TRADEMARK

OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
JW	MM	Mutsumi Ohta, Mitsuharu Yano and Takao Nishitani, "Wavelet Picture Coding with Transform Coding Approach", 1/31/99, pp. 776-785.	
JW	NN	French Search Report, FR9511024, 11/26/1996.	RECEIVED
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JW	PP	Dutch Search Report, NO133082, 11/26/1996.	Technology Center 2600
JW	QQ	Calderbank, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.	
JW	RR	Szu et al., "Image Wavelet Transforms Implemented by Discrete Wavelet Chips", July 1994, <u>Optimal Engineering</u> , Vol. 33, No. 7, pp. 2310-2325.	
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**INFORMATION DISCLOSURE
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of

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Application Number	09/704,991
Filing Date	November 2, 2000
First Named Inventor:	Edward L. Schwartz
Group Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	074451.P042X

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NOV 01 2002**OTHER ART – NO PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title or the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
JL	YY	Said, et al., "Image Compression Using the Spatial-Orientation Tree", <u>IEEE</u> , 1993, pp. 279-282.	
JL	ZZ	Xiong, et al., "Joint Optimization of Scalar and Tree-Structured Quantization of Wavelet Image Decompositions", <u>IEEE</u> , 1/11/93, pp.891-895.	
JL	AAA	Howard et al., "Fast and Efficient Lossless Image Compression", <u>IEEE</u> , 1993, pp. 351-360.	
JL	BBB	Shapiro, J.M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.	
JL	CCC	Cha Keon Cheong, Kyoharu Aizawa, Takahiro Saito and Mitsutoshi Hatori; "Subband Image Coding with Biorthogonal Wavelets"; 7/92; Pages 871-881	
JL	DDD	Antonini et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol. 1, No. 2, April 1992, pp. 205-220.	
JL	EEE	Chui, et al., "Wavelets on a Bounded Interval", <u>Numerical Methods of Approximation Theory</u> , Vol. 9, 1992, pp. 53-75.	
JL	FFF	Shah et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.	
JL	GGG	Langdon, Jr., Glen G., "Sunset: A Hardware-Oriented Algorithm for Lossless Compression of Gray Scale images", <u>SPIE Vol. 1444, Image Capture, Formatting, and Display</u> , 1991, p. 272-282.	
JL	HHH	A.S. Lewis and G. Knowles; "Image Compression Using the 2-D Wavelet Transform"; 11/15/90, Pages 244-250	
JL	III	Le Gall, et al., "Sub-band Coding of Digital Images Using Symmetric Short Kernel Filters and Arithmetic Coding Techniques", 1988, <u>International Conference on Acoustics, Speech and Signal Processing</u> , pp. 761-764.	

Examiner Signature		Date Considered	4/14/08
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	09/704,991
Filing Date	November 2, 2000
First Named Inventor:	Edward L. Schwartz
Group Art Unit	2621
Examiner Name	
Attorney Docket Number	74451.P042X2

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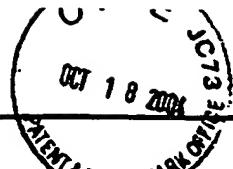
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4/14/18

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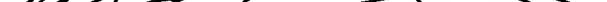
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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<p>Substitute for Form 1449/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				Complete if Known	
				Application Number	09/704,991
				Filing Date	November 1, 2000
				First Named Inventor:	Edward L. Schwartz
				Art Unit	2623
				Examiner Name	Wu, Jingge
Sheet	1	of 1		Attorney Docket Number	74451.P042X2

NON PATENT LITERATURE DOCUMENTS

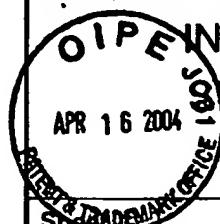
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Attorney Docket Number

074451.P042X2

Complete if Known

Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
JW	us	3,580,655	5/25/1971	Leith et al.	
JW	us	3,950,103	4/13/1976	Schmidt-Weinmar	
JW	us	4,136,954	1/30/1979	Jamieson	
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Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu
Attorney Docket Number	074451.P042X2

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Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
JW	US-4,985,927		1/15/1991	Norwood et al.	
JW	US-4,987,480		1/22/1991	Lippman et al.	
JW	US-4,999,705		3/12/1991	Puri	
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Application Number 09/704,991

Filing Date 11/01/2000

First Named Inventor: Edward L. Schwartz

Art Unit 2623

Examiner Name Jingge Wu

Attorney Docket Number 074451.P042X2

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
JW	us.	5,414,780	5/9/1995	Carnahan	
JW	us.	5,416,604	5/16/1995	Park	
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
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Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu

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of

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Attorney Docket Number

074451.P042X2

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
JW		EPO 0510933 A1	10/28/1992	Canon Kabushiki Kaisha		
JW		EPO 0593013 A2	4/20/1994	Kabushiki Kaisha Toshiba		
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JW		EPO 0622741 A2	11/2/1994	Klics, Ltd.		
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JW		JP 06-245077	9/2/1994	Nec Corp.		
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Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu

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of

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Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
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		Art Unit	2623
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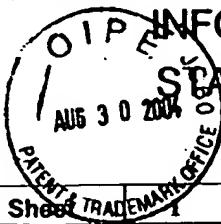
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		Number-Kind Code ² (if known)			
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